

GCF

Greatest Common Factor

Listing

18 - 1, 2, 3, 6, 9, 18
30 - 1, 2, 3, 5, 6, 10, 15, 30

$$\text{GCF} = 6$$

Prime Factorization - multiply all
common prime factors.

$$\begin{array}{c} 60 \\ \wedge \\ 30 \times 2 \\ \wedge \quad | \\ 15 \times 2 \times 2 \\ \wedge \quad | \quad | \\ 5 \times 3 \times 2 \times 2 \end{array}$$

$$\begin{array}{c} 90 \\ \wedge \\ 45 \times 2 \\ \wedge \quad | \\ 9 \times 5 \times 2 \\ \wedge \quad | \quad | \\ 3 \times 3 \times 5 \times 2 \end{array}$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$90 = 2 \times 3 \times 3 \times 5$$

$$\begin{aligned} \text{GCF} &= 2 \times 3 \times 5 \\ &= 30 \end{aligned}$$